No. 708,466. Patented Sept. 2, 1902.

W. H. DAVIS.

AXLE.

(Application filed Nov. 20, 1901.)

(No Model.)

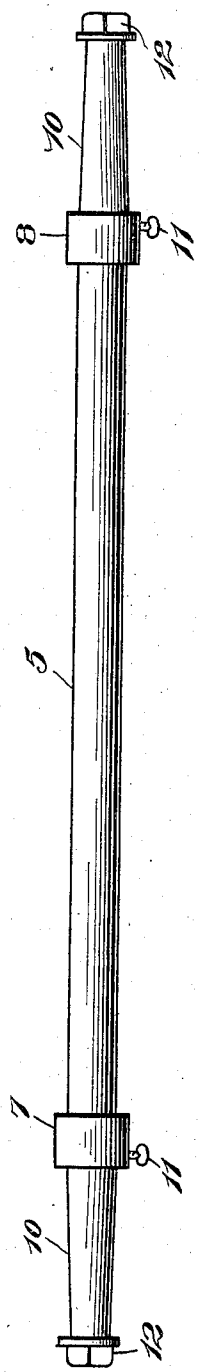


Fig. 1.

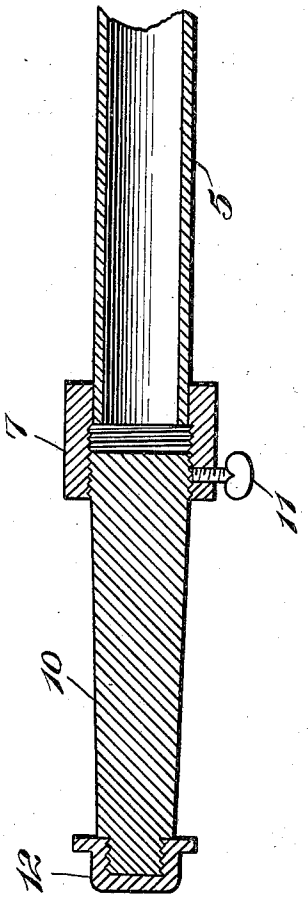


Fig. 2.

Witnesses

T. P. Brett

Harry Ellis Chandlee

Inventor

W. H. Davis,

by Goodwin & Chandlee.

Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM H. DAVIS, OF BEAVER MEADOW, ALABAMA.

AXLE.

SPECIFICATION forming part of Letters Patent No. 708,466, dated September 2, 1902.

Application filed November 20, 1901. Serial No. 83,004. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DAVIS, a citizen of the United States, residing at Beaver Meadow, in the county of Mobile, State of Alabama, have invented certain new and useful Improvements in Axles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to vehicle-axles; and it has for its object to provide an axle which may be made in sections and will include a central portion or member of tubular form and removable spindles, which will permit of the use of different spindles for different lengths of hubs, and will permit of adjustment of the spindles to compensate for wear of the ends of the boxes of the hubs.

Other objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in both views, Figure 1 is an elevation showing the complete axle. Fig. 2 is a longitudinal section through one end of the axle and including the spindle thereof.

Referring now to the drawings, the present axle comprises a central portion or member 5, which is in the form of a tube or section of wrought-iron pipe of a length to reach to the ends of the axletree, against which it is secured by means of clips. Upon the ends of the member 5 are secured collars 7 and 8, which are shrunken into place or may be screwed on and keyed, if preferred, the outer ends of the collars in any event being internally threaded, as shown. Into the threaded outer end of each collar 7 and 8 is screwed a spindle 10, the inner enlarged end of which is threaded for the purpose, the spindle being screwed up to the proper extent and being held against accidental rotation and consequent feeding inwardly or outwardly by means of a set-screw 11 or, if preferred, by means of a jam-nut. The outer ends of the collars, as shown, are squared to receive the bearing of the inner ends of the boxes of the hubs which are disposed upon the spindles, and said boxes are held in close contact by means of the usual axle-nuts 12.

It will be noted that the spindles are free from projections, so that the ends of the boxes may bear against the ends of the collars, and thus as the ends of the boxes and collars wear the spindles may be screwed into the collars to compensate therefor, so that at all times there will be a snug running fit of the hubs upon the spindles. Furthermore, when a spindle is worn out it may be easily and quickly removed and a new one substituted, or different spindles may be used to accommodate hubs of different dimensions, all of these adjustments being permitted without removing the axle from the vehicle to which it is attached.

What is claimed is—

1. An axle comprising a central pipe, internally-threaded collars engaged with the ends of the pipe and having flat bearing-faces at their outer ends, and spindles having their inner ends threaded and adjustably engaged with the threads of the collars for projection therefrom to different extents, said spindles being without surface projections, to permit of direct contact of the hub-boxes with the end faces of the collars, and means for holding the spindles at different points of their adjustments.

2. An axle comprising a central member having terminal, internally-threaded collars having flat bearing end faces, and spindles having their inner ends threaded and adjustably engaged with the threads of the collars to project to different extents from the collars, said spindles being without surface projections, to permit direct contact of the hub-boxes with the end faces of the collars, and means for holding the spindles at different points of their adjustments.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. DAVIS.

Witnesses:

M. S. MICHAEL,

ALEX DAVIS.